

THE NEST AND EGGS OF THE OLIVE WARBLER
(*DENDROICA OLIVACEA*).

BY WILLIAM W. PRICE.

THE Olive Warbler, *Dendroica olivacea* (Giraud), is not uncommon in the higher pine-covered mountains of southern Arizona. I met with it during the summer of 1894, in the Huachuca, Chiricahua, Graham, and White Mountains.

My first observation of this species was made on May 22, in the Huachuca Mountains. I was on a ridge at nine thousand feet elevation, in open pine woods, studying a colony of Violet-green Swallows, which had nests in some dead trees. Suddenly an Audubon's Warbler, a male in full spring plumage, darted by me, closely pursued by a smaller orange-headed bird. Just as they had passed me, the smaller bird, which proved to be an adult male Olive Warbler, alighted on a low pine branch and uttered a low, short song. I secured it, and to my delight, held in my hand the first male Olive Warbler I had ever seen. Later in the day, in open pine woods at about the same elevation, I obtained another adult male from among low pine branches, where it was busily searching after insects. On this occasion, I saw no females, and I had reason to believe that with this species migration had just begun.

I next saw the Olive Warbler on June 10, on the summit of the Chiricahua Mountains, at about nine thousand feet. The open pine woods here were very similar to those in the Huachuca Mountains, where I had already taken the bird. On June 14, I secured three specimens, two adult males and a female. The female had evidently laid her set of eggs. I saw several other specimens on that day, all in open woods and all busy searching for insects.

On June 15, in the Chiricahua Mountains, I noticed a pair of Olive Warblers apparently at nest-building. The region was a dry open park, thinly set with young pines (*Pinus jeffreyi*), at between nine and ten thousand feet above the sea. I saw a female, closely followed by a male, fly from a bush of spirea

(*Spiraea discolor*) to the top of a small pine, and busy itself on a small horizontal limb partially concealed by pine needles. She soon returned to the spirea, followed by the male, which did not enter the bush but perched on a pine branch near by. The female again flew with a dry flower-stem in her bill, from the bush directly to the pine, where a nest was in process of construction. The male again accompanied her and alighted on a twig, uttering at times a liquid *quirt, quirt, quirt*, in a descending scale. I watched them for over an hour, when they finally disappeared. During this time, the male did not once assist at nest-building, but accompanied the female back and forth. On June 18, I again visited the place and found the female busy at work, but the male was as idle as before.

On June 21, I was fortunate in securing a male and female, and two young Olive Warblers, the latter just able to fly. The adults were feeding the young which were noisy, as most young birds are. This male was not in fully adult plumage and was very similar in coloration to the female.

A few days after, a forest fire drove me from my camp, and it was not until July 1 that I was able to visit the nest. The female was sitting, and when frightened from the nest, kept hovering about, but made no sound. The male did not appear at all. The nest was compactly built and placed on a small horizontal branch, about forty feet from the ground, and about six feet from the top of the tree. The eggs, four in number, were in an advanced state of incubation.

I subsequently found the Olive Warbler both in the Graham and the White Mountains. This latter range is in east-central Arizona, and is apparently the northern limit of distribution of this species.

The body and walls of the nest are composed of rootlets and flower stalks of *Spiraea discolor*, and the inner lining consists of fine rootlets and a very small quantity of vegetable down. It is a compactly built structure, measuring about 4 inches in outer diameter by $1\frac{3}{4}$ inches in depth; the inner cup measures 2 inches in width by $1\frac{1}{2}$ inches in depth.

The eggs are ovate in shape, the shell is fine grained and without lustre. The ground color is sage green and the egg is heavily

blotched and spotted, especially about the larger end, with clove and sepia brown, and lighter shades of drab and olive gray. They bear no resemblance to the known eggs of any of our Warblers. They measure .65 by .49, .65 by .49, .65 by .48, and 63 by .48 inches.

A CONTRIBUTION TO THE LIFE HISTORY OF
PORZANA CINEREICEPS LAWRENCE, WITH
CRITICAL NOTES ON SOME
OF ITS ALLIES.

BY CHARLES W. RICHMOND.

DURING a year's rambling in Nicaragua after natural history specimens in general, and birds in particular, I had many opportunities for observing this trim and neatly attired little bird in its home surroundings, not only through its abundance and perfect fearlessness, but also because the conditions favorable to its daily life existed on all sides. Upon landing at Greytown, our party cast about for lodgings convenient to the woods, and shortly decided upon a small house at the edge of town, where we spent the remainder of the day unpacking and arranging our extensive outfit. Next morning, February 1, 1892, the various members of the party sauntered forth to learn something of the surrounding country, and incidentally to collect anything of interest. My walk led me along a narrow, sandy roadway, flanked by impenetrable bushy thickets, with occasional open spaces and marshy spots, and branch paths leading to neighboring haciendas.

My first impressions of tropical bird-life were anything but satisfactory. There was no dearth of birds, but the thickets were so dense that without a machete it would have been impossible to reach them. With a single exception all the birds seen on this occasion belonged to families represented in North America by from six to nearly one hundred species. This scarcity of purely tropical forms was due mainly to the fact that